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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,898	01/31/2001	William Edward Jennings	1700.102	8219

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EXAMINER	
JACKSON, ANDRE K	

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/773,898	JENNINGS ET AL.	
	Examiner	Art Unit	
	André K. Jackson	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,12-15 and 17-21* is/are rejected.

7)☒ Claim(s) *11 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4,5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Strauss et al.

Regarding claim 1, Strauss et al. disclose in "Batch microwave reactor" a pressure resistant vessel that is otherwise transparent to microwave radiation; a pressure-resistant closure for the mouth of the vessel, portions of the closure including a pressure resistant synthetic membrane; closure and membrane otherwise maintain the pressure resistant characteristics of the vessel and a pressure transducer external to the vessel (Figure 1).

Regarding claim 17, Strauss et al. discloses a pressure resistant reaction vessel formed of a microwave transparent material; the vessel having a cylindrical portion defined by concentric inner and outer walls, that terminates in a cylindrical opening; an annular rim extending

outwardly from the circumference of the cylindrical opening, and defining a rim circumference concentric with the cylindrical portion and the cylindrical opening, a pressure resistant fitting for the reaction vessel and fixed to the run; and the vessel having a curved outer wall portion between the concentric outer wall and the rim circumference (Figures 1-3).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2-10,12-15,18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strauss et al. in view of Sadler.

Regarding claim 2, Strauss et al. does not explicitly disclose where the closure has a metal perimeter for gripping the vessel at the mouth; and where the membrane has the center portion of the closure surrounded by the metal perimeter. However, Sadler discloses in "Continuous flow moisture analyzer" where the closure has a metal perimeter for gripping the vessel at the mouth; and where the membrane has the center portion of the closure surrounded by the metal perimeter (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify Strauss et al. to include where the closure has a metal perimeter for gripping the vessel at the mouth; and where the membrane has the center portion of the closure surrounded by the metal perimeter as taught by Sadler. By adding this feature the user would be able keep the membrane stable when placed on the vessel.

Regarding claim 3, Strauss et al. does not disclose where the metal perimeter is clamped to the mouth of the vessel. However, Sadler discloses where the metal perimeter is clamped to the mouth of the vessel (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include where the metal perimeter is clamped to the mouth of the vessel as taught by Sadler. By adding this feature the user would be able to secure the component to the top portion of the vessel.

Regarding claim 4, neither Strauss et al. nor Sadler disclose where the membrane comprises butyl rubber. However, it is well within the purview of the skilled artisan to make the membrane of a particular resilient material to hold its form.

Regarding claim 5, neither Strauss et al. nor Sadler disclose where the membrane comprises a siloxane polymer. However, it is well within the purview of the skilled artisan to make the membrane of a particular resilient material to hold its form.

Regarding claim 6, Strauss et al. does not disclose where the tube comprises a needle. However, Sadler discloses where the tube comprises a needle (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include where the tube comprises a needle as taught by Sadler. By adding this feature the user would be able to prescribe a certain amount fluid into or out of the vessel.

Regarding claim 7, Strauss et al. does not explicitly disclose that the system is formed of glass. However, Sadler discloses where the system is formed of glass (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include where the system is formed of glass as taught by Sadler. By adding this feature the components could be observed during the process phase of the apparatus.

Regarding claim 8, Strauss et al. does not disclose a means for securing the membrane and the closure against pressure developed in the vessel during a chemical reaction. However, Sadler discloses a means for securing the membrane and the closure against pressure developed in the vessel during a chemical reaction (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss to include a means for securing the membrane and the closure against pressure developed in the vessel

during a chemical reaction as taught by Sadler. By adding this feature the user would be able to avoid leakage from the vessel.

Regarding claim 9, Strauss et al. discloses a pressure-resistant vessel that is transparent to microwave radiation a closure for the vessel; a pressure transducer external to the vessel and the closure (Figure 1). What is not disclosed by Strauss is a needle for extending from the transducer, through the closure and into the vessel and for providing pressure communication between the interior of the vessel and the transducer and a collet for engaging and maintaining the transducer, the needle, the closure and the vessel in linear relationship so that the pressure in the vessel is transmitted to the transducer while the vessel is in use. However, Sadler discloses a needle for extending from the transducer, through the closure and into the vessel and for providing pressure communication between the interior of the vessel and the transducer and a collet (sleeve, 40) for engaging and maintaining the transducer, the needle, the closure and the vessel in linear relationship so that the pressure in the vessel is transmitted to the transducer while the vessel is in use (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include a needle for extending from the transducer, through the closure and into the vessel and for providing pressure communication between the interior of the vessel and the transducer and

a collet for engaging and maintaining the transducer, the needle, the closure and the vessel in linear relationship so that the pressure in the vessel is transmitted to the transducer while the vessel is in use as taught by Sadler. By adding these features the user would be able to provide a constant link for observing the pressure within the vessel.

Regarding claim 10, Strauss discloses where the vessel has a cylinder and the closure has a cap for the vessel (Figures 1-3).

Regarding claim 12, Strauss et al. does not disclose a closure having a penetrable septum for receiving the needle therethrough while maintaining; a pressure seal to the vessel. However, Sadler discloses a closure having a penetrable septum for receiving the needle therethrough while maintaining; a pressure seal to the vessel (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include a closure having a penetrable septum for receiving the needle therethrough while maintaining; a pressure seal to the vessel as taught by Sadler. By adding this feature the user would be able to provide a constant pressure seal on the vessel.

Regarding claim 13, Strauss et al. does not explicitly disclose where the closure has a metal perimeter for gripping the vessel at the mouth; and where the membrane has the center portion of the closure surrounded by the metal perimeter. However, Sadler discloses in

"Continuous flow moisture analyzer" where the closure has a metal perimeter for gripping the vessel at the mouth; and where the membrane has the center portion of the closure surrounded by the metal perimeter (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include where the closure has a metal perimeter for gripping the vessel at the mouth; and where the membrane has the center portion of the closure surrounded by the metal perimeter as taught by Sadler. By adding this feature the user would be able keep the membrane stable when placed on the vessel.

Regarding claim 14. neither Strauss et al. nor Sadler disclose where the septum is formed of a material selected from the group consisting of butyl rubber and siloxane polymers. However, it is well within the purview of the skilled artisan to make the membrane of a particular resilient material to hold its form.

Regarding claim 15, Strauss et al. does not disclose a means for securing the septum against pressure developed in the vessel. However, Sadler discloses a means for securing the septum against pressure developed in the vessel (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss to include a means for securing the membrane and the closure against pressure developed in the vessel during a chemical

reaction as taught by Sadler. By adding this feature the user would be able to avoid leakage from the vessel.

Regarding claim 18, Strauss et al. does not disclose where the pressure resistant fitting includes an annular metal portion clamped to the rim. However, Sadler discloses where the pressure resistant fitting includes an annular metal portion clamped to the rim (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include where the pressure resistant fitting includes an annular metal portion clamped to the rim as taught by Sadler. By adding this feature the user would be able to secure the component to the top portion of the vessel.

Regarding claim 19, Strauss et al. does not disclose where the pressure resistant fitting has a penetrable septum. However, Sadler discloses where the pressure resistant fitting has a penetrable septum (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include where the pressure resistant fitting has a penetrable septum as taught by Sadler. By adding this feature the user would be able to provide a constant pressure seal on the vessel.

Regarding claim 21, Strauss et al. does not explicitly disclose that the system is formed of glass. However, Sadler discloses where the system is formed of glass (Figure 8). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to modify Strauss et al. to include where the system is formed of glass as taught by Sadler. By adding this feature the components could be observed during the process phase of the apparatus.

5. Claims 11 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (703) 305-1522. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A.J.

December 12,2003

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800